Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for operating an embedded system covering a plurality of technical applications, the operative functions of which are performed with a respective plurality of application-specific Electronic Control Units [[(ECU)]] (ECUs), wherein ~~(10, 12, 14, 16, 181,~~ each ECU having separate need of resources regarding at least processing and storage subsystems, ~~subsystem,~~ the method characterized by the steps of:

a) operating a preselected one of said ECUs as a "donor" ECU [[(18)]] being provided with predefined storage subsystem resources[[,]]; and

b) in case of a breakdown of either a storage subsystem [[and/]] or processing subsystem of [[an]] a "non-donor" ECU [[(12)]] donating respective predefined resources corresponding to either a broken down storage subsystem or a broken down processing subsystem from said "donor" ECU to said ~~breakdown~~ "non-donor" ECU [[(12)]], wherein either an unbroken down storage subsystem or an unbroken down processing subsystem remains, and wherein the "non-donor" ECU retains the corresponding unbroken down processing subsystem or the corresponding unbroken down storage subsystem.

2. (Currently Amended) The method according to claim 1 further comprising the steps of:

a) operating a preselected one of said ECUs as a "donor" ECU [[(18)]] with a storage subsystem [[(32)]] being increased for some predetermined degree,

b) reserving for at least one non-donor ECU [[(12)]] of said ECUs a respective predetermined storage area [[(50)]] in the storage subsystem [[(32)]] primarily associated with said preselected donor ECU [[(18)]] of said plurality of ECUs[[,]];

c) providing to each non-donor ECU [[(12)]] an access to a respective one of said reserved storage areas [[(50),]];

d) monitoring the operation of said ECUs, in case of breakdown of a non-donor ECU [[(12)]] storage subsystem [[(24)]] breakdown[[:]];

e) transforming addresses associated with said reserved storage area [[(50)]] to new addresses adapted for being accessible by said ~~breakdown~~ non-donor ECU [[(12)]]; and

f) assigning access to said non-donor ECU [[(12)]] to a respective one of said reserved storage areas (50) by using said transformed new address.

3. (Currently Amended) The method according to claim 1, in which a split-cycle mode operation is performed in which in one memory operation cycle of the donor-ECU [[(18)]] the donor ECU and one non-donor ECU [[(12)]] access the same storage subsystem [[(32)]].

4. (Currently Amended) The method according to claim 1, further in case of breakdown of a non-donor ECU processor [[(20)]] breakdown comprising the step of:

operating said donor ECU [[(18)]] in a shared-processor mode, in which a predetermined controllable extent of donor-ECU processor [[(28)]] resources is used to run applications, which have run at ~~the breakdown~~ said non-donor ECU [[(12)]] before its breakdown.

5. (Currently Amended) The method according to claim 1, in which the donor ECU [[(18)]] is a human interface Multimedia unit, and a non-donor ECU [[(12)]] is a real-time ECU having a considerable lower storage need than the donor ECU.

6. (Original) The method according to claim 1, in which a breakdown is defined by errors limitedly resulting in a non-successful operation of a subtotal of applications running in an ECU.

7. (Currently Amended) The method according to ~~claim 1~~ claim 2, comprising the step of reserving said storage area (SO) by hardware means, by processor-specific memory management means, operation system specific means, or middleware-specific means.

8. (Currently Amended) The method according to the preceding claim 3, in which write and read accesses are performed permanently to both, the respective own donor-ECU storage subsystem [[(32)]] and to a respective reserved area [[(50)]] in the donor-ECU subsystem, and said split-cycle operation mode is performed permanently.

9. (Currently Amended) The method according to claim 8, further comprising the [[step]] steps of:

[[a)]] in a split cycle comparing read data of a non-donor ECU [[(12)]] and respective redundant read data from said respective reserved storage area [[(50)]] in said donor-ECU [[(18),]]; and

if read data is not identical, initiating predetermined error management.

10. (Currently Amended) An embedded system having means for performing the steps of a method according to any of claims 1 to 9, comprising a hardware logic circuit [[(40)]] connectable between a

donor ECU [[(18)]] and a non-donor ECU [[(12)]], said hardware logic circuit [[(40)]] comprising logic means for implementing the donating functions.

11. (Currently Amended) [[The]] An embedded system ~~according to claim 10~~ comprising a hardware logic circuit (40) connectable between a donor ECU and a non-donor ECU, said hardware logic circuit comprising logic means for implementing the donating functions, in which said hardware logic circuit [[(40)]] comprises:

a) an autonomic system control means [[(60)]] implementing system faults handling means operatively connected to

b) a DSSM signal control circuit [[(64)]] connected for implementing the multiplexing of storage accesses and the address transforming operations, and to

c) a split-cycle timing generator [[(70)]] connected for implementing a shared access to said donor ECU storage subsystem [[(32)]];

said system having means for performing the steps of a method covering a plurality of technical applications, the operative functions of which are performed with a respective plurality of application-specific Electronic Control Units (ECU), each ECU having separate need of resources regarding at least processing and storage subsystem, characterized by the steps of:

a) operating a preselected one of said ECUs as a "donor" ECU being provided with predefined storage subsystem resources; and

b) in case of a breakdown of either a storage subsystem or processing subsystem of a "non-donor" ECU donating respective predefined resources corresponding to either a broken down storage subsystem or a broken down processing subsystem from said "donor" ECU to said "non-donor" ECU, wherein either an unbroken down storage subsystem or an unbroken down processing subsystem remains, and wherein the "non-donor" ECU retains the corresponding unbroken down processing subsystem or the corresponding unbroken down storage subsystem;

in which a split-cycle mode operation is performed in which in one memory operation cycle of the donor-ECU the donor ECU and one non-donor ECU access the same storage subsystem; and

in which write and read accesses are performed permanently to both, the respective own donor-ECU storage subsystem and to a respective reserved area in the donor-ECU subsystem, and said split-cycle operation mode is performed permanently.

12. (Currently Amended) The embedded system according to claim 11 in which a multiplexer means is provided within said DSSM signal control circuit [[(64)]] for assigning access to said non-donor ECU to a respective one of said reserved storage areas, which is implemented as a FET switch array.

13. (Currently Amended) The embedded system according to claim 12 in which said autonomic system control means [[(60)]] is implemented in a programmable ASIC.